

**Autumnwood ESH Consultants**

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15 April 2019

Mr. John Nordine  
U.S. EPA Region 5  
RCRA Enforcement and Compliance Assurance Branch (LU-16)  
77 West Jackson Boulevard  
Chicago, Illinois 60604

Re: Central Wire, Union, Illinois RCRA CMI Monthly Progress Report, March 2019,  
EPA ID: ILD005178975

Dear Mr. Nordine:

Enclosed please find the RCRA CMI Monthly Progress Report for the Central Wire, Inc. (CWI) facility located in Union, Illinois for March 2019.

This report includes the eDMR for the groundwater pump & treat facility, the NPDES laboratory analytical report, which includes the effluent data used in the eDMR and the Ex. 6 Personal Privacy (PP) analytical data for Volatile Organic Compounds. This analytical data is included in the 3-2019 NPDES Analytical Report file.

Also included is the analytical report associated with the Extraction Well No. 2 (EW-2) Field Investigation.

If you have any comments or questions regarding the progress of this project, please contact me at (262) 237-1130.

Sincerely,

**Autumnwood ESH Consultants, LLC**

John W. Thorsen, P.E.

JWT: jt

Encl

cc: Joyce Munie IEPA  
Gerald W. Ruopp CWI

Robert Kay USGS  
Robert Johnson CWI

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**MONTHLY PROGRESS REPORT**  
**Central Wire Union, Illinois Site**  
**March 2019**

**1 Progress Made This Reporting Period**

**Groundwater Pump & Treat System**

In this reporting period Central Wire Inc. (CWI) continued the operation and maintenance of the groundwater extraction and treatment (P&T) system. Table 1, attached, lists the average daily P&T volumes by month from January 2015 through March 2019. The average for March was 446,000 gallons per day (GPD). The maximum daily flow was 757,000 GPD. The reduced average daily flows primarily resulted from two 4 day shutdowns prior to the 1,000 minute pump test. CWI noted that the flows on April 1, 2019 were 241 gallons per minute (GPM) in Extraction Well No. (EW-1) or 347,000 gallons per day (GPD). Flow in EW-2 was 285 GPM or 410,400 GPD.

The laboratory analytical report for the pump and treat effluent sample is attached. Samples were collected on March 27, 2019 and arrived at the Test America Laboratory on March 28, 2019 at 2.9° C.

The monthly NPDES sample met effluent limitations for pH, 1,1, t-Trichloroethane (TCA), Trichloroethene (TCE) and Tetrachloroethene (PCE). The electronic Discharge Monitoring Report (eDMR) for the month is attached to this report.

**EW-2 Field Investigation**

In March CWI and its contractor, Geoserve, placed and CWI developed three piezometers, 10 feet, 50 feet and 200 feet west of EW-2 and 35 feet deep. This initiated the evaluation of the capture zone of EW-2. The wells were surveyed in relative to the concrete slab at EW-2 and groundwater levels were measured in EW-1, EW-2, P1 (10 ft. west of EW-2), P5 (50 ft. west) and P20 (200 ft. west).

VOC samples were collected from the three piezometers on March 19, 2019 and arrived at the laboratory on March 21, 2019. While the samples aren't generally usable due to carry over from earlier-analyzed high concentration samples that were present in all samples, including the trip blank (see Case Narrative in the attached *Pre 1,000 minute pump test analytical report – 3-2019*), a conclusion can be drawn from this data. EW-2 is likely on the western edge of the chlorinated plume based on the low levels of chemicals of concern found in the samples (which may not even be from CWI). CWI intends to resample these wells in mid April.

CWI began the 1000 Minute Pump Test on March 25 at 1400 hours and was completed at 0642 hours on March 26. The transducer data files will be sent under

separate cover.

Samples are planned to be collected again after the 1,000 hour pump test in May.

#### **Ex. 6 Personal Privacy (PP) Samples and Well Usage**

The **Ex. 6 Personal Privacy (PP)** was collected on the same day as the pump and treat effluent samples and sent to the analytical laboratory in the same batch as the NPDES sample. There were no detections in this sample.

The analytical data is in the same analytical report as the pump and treat samples (*3-2019 NPDES Analytical Report*). **Ex. 6 Personal Privacy (PP)** sample locations are provided in Figure 1.

#### **CWI Quarterly Extraction Well Samples**

These samples are generally collected quarterly in the third month of the calendar quarter. The results are provided in Table 2, attached, which shows the quarterly data back to the first quarter of 2014. The analytical report is attached (*3-2019 NPDES Analytical Report*). There was no significant increase or decrease in the concentrations.

#### **Ex. 6 Personal Privacy (PP) Replacement Irrigation and CWI Pump & Discharge Wells at South Branch Nursery**

CWI may never have to install the **Ex. 6 Personal Privacy (PP)** replacement irrigation well. In the recent CWI 2018 RCRA CMI Field investigation, CWI evaluated the groundwater between the 2016 location of the leading edge of the chlorinated plume and the **Ex. 6 Personal Privacy (PP)**.

**Ex. 6 Personal Privacy (PP)** The analytical data indicate that the plume has not significantly moved into that space, i.e., no MCLs were exceeded in any of the 27 samples. It is CWI's intent to install the pump and discharge well as soon as permits are obtained and lease agreements are signed.

Distance drawdown calculations have shown that, at 800 gallons per minute, the drawdown will encapsulate the current irrigation well and draw down the water level at the irrigation well by 2.68 feet after one year and 4.3 feet after 30 years. There is still 1.27 feet of drawdown at a 3,000 foot distance after 12 months of pumping at 800 gpm.

IEPA has not reissued the CWI NPDES pump and treat permit which includes outfall no. 2 for the discharge from the pump and discharge well to be located at the South Branch Nursery. This permit was reapplied for in October 2017 and it expired on May 31, 2018. IEPA has issued two draft permits, but no final permit has been issued at this date. IEPA has indicated that CWI can continue to operate until the NPDES permit is issued. CWI continues to call regularly to determine the status of the permit. CWI has spoken to the permit Section Manager twice in the past 5 months and he indicated he would review the permit "that day".

**Ex. 6 Personal Privacy (PP) Pumpage**

Ex. 6 Personal Privacy (PP) has stored their pump engines for the winter season.

**2 Summary of Validated Data and Results****Pump & Treat System Monthly NPDES Samples**

The permit limitations and analytical results are shown in Table 3, below. There were no effluent limitation exceedances.

**Table 3****Central Wire Union Illinois Pump & Treat Effluent Analytical Results**

Parameter	Effluent Limitation (Daily Maximum), µg/L	Effluent Analytical Results, µg/L
1,1,1-Trichloroethane	20	0.85 J*
Tetrachloroethene	20	1.2
Trichloroethene	20	0.86 J

J = Estimated value. Analyte detected at a level < the Reporting Limit (RL) and > or = to the Method Detection Limit (MDL). The user of this data should be aware that this data is of limited reliability.

\* = LCS or LCSD is outside acceptance limits.

Table 4 tabulates and plots the trends in the effluent limited parameters of TCA, PCE and TCE. The results of the March grab sample were in the zone that has trended over 2018, i.e., < 1.5 µg/L. Also detected was cis-1,2-Dichloroethene at 11 µg/L (EPA MCL of 70 µg/L) and 1,1-Dichloroethane at 1.6 µg/L (no MCL).

This NPDES analytical report also has environmental analytical results for CWI's North and South Seepage Ponds. These ponds are Illinois EPA-regulated seepage ponds for CWI's rinse waters from the annealing process, non-contact cooling water, boiler blowdown and for storm water collection.

**3 Upcoming Events/Activities Planned** – CWI will continue to operate the existing remediation systems. Effluent samples will be collected, analyzed and reported as required in CWI's NPDES permit.

CWI began the 1,000 hour pump test on March 27, 2019 at 1200 hours. This pump test will be complete at 0400 hours on May 8, 2019.

CWI completed the 1,000 Minute Pump Test in March and will forward the data under separate cover.

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At EPA's request CWI will prepare a short work plan to sample groundwater at three Geoprobe locations. Those samples will be collected at 85 feet below ground surface (bgs) and 57 and 27 feet bgs and analyzed for volatile organic compound via EPA Method 8260C.

CWI has reapplied for the NPDES permit for this system, adding a second outfall for the pump and discharge system, and awaits permit issuance by IEPA. The new permit has been public noticed and there have been requests for a public hearing. IEPA reissued the draft permit for its 30 day notice with the current effluent limitations and there were no additional comments.

CWI has received a draft lease agreement from **Ex. 6 Personal Privacy (PP)** for the land needed to construct and operate the pump and discharge well and Arcelor, the former owner who has retained responsibility for environmental liabilities at the site, is currently reviewing that lease agreement.

CWI will evaluate the capture zones of EW-1 and EW-2.

Samples will continue to be collected at the **Ex. 6 Personal Privacy (PP)** **Ex. 6 Personal Privacy (PP)** every month when the irrigation pump is operating, usually between May and November of each year.

- 4 **Anticipated Problem Areas and Recommended Solutions** – None.
- 5 **Key Personnel Changes** – None.
- 6 **Target and Actual Completion Dates** – This project has not deviated from the project schedule.